

ABSTRACT OF THE DISCLOSUREINTEGRATED OPTICS ARTIFICIAL CLADDING GRATING WITH A  
COUPLING VARIATION AND ITS REALISATION METHOD

The invention relates to an integrated optics artificial cladding grating comprising in a substrate (20) an optical guide core (2), an optical cladding (3, 3a, 3b, 3c, 3d) independent of the core and surrounding  
5 at least a portion of the core in a zone of the substrate called the zone of interaction (11) comprising a grating (19) capable of coupling at least one guided mode of the core to at least one cladding mode or vice versa, the said zone of interaction  
10 comprising a coupling variation along the direction of propagation  $z$  of the modes, the refractive index of the cladding being different to the refractive index of the substrate and lower than the refractive index of the core in at least the part of the cladding next to the  
15 core in the interaction zone.

Fig. 2